Promoting Persistence in Online Programs

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Abstract

The surging attractiveness of distance education has become progressively prevalent. Candidates are pursuing better opportunities to integrate a balance between all of their commitments. Distance education incorporates educational growth with an accessible online structure allowing for the flexibility necessary to reach their personal and professional potential. The problem facing higher education institutions utilizing the Internet as a major educational delivery vehicle is the difficulty in promoting persistence within the offered programs. Persistence factors present unique challenges for not only the candidates, but the instructors as well. In this explanatory sequential mixed methods study, the researchers investigated factors that promoted persistence in three foundational graduate education online courses. The researchers used quantitative enrollment data in conjunction with qualitative anecdotal records to examine candidates' persistence in this online program. The researchers found that successful persistence in an online learning environment were favorably interrelated to peer collaboration, instructor feedback and professional content design.

Keywords: persistence in online programs, peer collaboration, instructor feedback, content design

Promoting Persistence in Online Programs

Online programs are becoming a more prevalent course delivery in higher education. Distance learning programs incorporate educational growth opportunities with a flexible online structure. Candidates enrolling in higher education online programs seek a prestigious program, which will be deemed creditable to both employers and other universities alike (Betts, Hartman, & Oxholm, 2009; Bocchi, Eastman, & Swift, 2004). In an effort to achieve anytime, anywhere convenience and flexibility of schedule, candidates are seeking better ways to balance their online courses, work, family and other commitments for a successful educational experience (Betts, Hartman, & Oxholm, 2009; Bocchi, Eastman, & Swift, 2004; Picciano, Seaman, & Allen, 2010; Willging & Johnson, 2009). Unfortunately, the very reasons that motivate people to pursue online programs in the first place may also be the very reasons that they drop out of them.

Statement of the Problem

According to the National Center for Educational Statistics (2015), 31% of all post-baccalaureate candidates participated in some form of distance education, with 23% of all candidates participating exclusively in distance programs. Researchers have suggested that online programs have a higher attrition rate than their traditional face-to-face counterparts (Angelino, Williams, & Natvig, 2007; Carr, 2000; Frydenberg, 2007; Levy, 2007). However, the U.S. Department of Education isolated 51 common factors across a multitude of studies concluding that, in general, online learning is more effective than face-to-face learning (Boston, Diaz, Gibson, Ice, Richardson, & Swan, 2009). Some studies have found higher completion rates (93.1%) in online learning courses than in traditional learning (Meyer, Bruwelheide, & Poulin, 2009). To complicate matters further, definitions of online or distance education programs vary depending on the institution (Angelino, Williams, & Natvig, 2007; Carr, 2000;

Frydenberg, 2007; Levy, 2007). The National Center for Educational Statistics (2015) defines distance education as a program that "uses one or more technologies to deliver instruction to students who are separated from the instructor as well as to support regular and substantive interaction between the students and the instructor synchronously or asynchronously" (p. 103). By this definition, a distance education course could be a course with recorded supplemental lessons accessible for review on the Internet or a course with all modules, lessons, and interactions completely online. With an ever-growing number of candidates engaged in distance education, institutions of higher learning are seeking proactive retention and persistence strategies.

The current study sought to explore the promotion of persistence and retention in an online graduate education program at a regional public university. This explanatory sequential mixed methods study included quantitative enrollment data for three required courses and qualitative anecdotal records to explore more critically candidates' persistence in one of those required courses.

Theoretical Framework

Several theories have been proposed to explain candidate attrition though few theories specifically addressed candidate persistence. Tinto's (1987, as cited in Rovai, 2003) Student Integration Model addresses environmental factors that influence students prior to their college attendance and emphasizes the need for integration into college life to prevent attrition. Building on the work of Tinto, Bean and Metzner (1985) developed the Conceptual Model of Nontraditional Undergraduate Attrition, which included environmental factors that influence students prior to arrival at college and psychological factors that occur once students enroll, particularly for students considered to be nontraditional. The Composite Persistence Model,

introduced by Rovai (2003), combined several attrition theories with the necessary interpersonal and computer skills to address the needs of online learning programs. Garrison, Anderson, and Archer (2000) developed a model for evaluating "educational experiences" online (p. 88). The Community of Inquiry model involved the overlapping experiences and interaction of cognitive presence, social presence, and teaching presence.

Literature Review

To fully develop effective strategies for promoting persistence in online learning programs, institutions of higher education must evaluate why students drop out of these programs (Willging & Johnson, 2009). However, attrition in online programs is a complex issue with many mitigating factors. Personal, financial, work-related, and program-related factors dominated the reasons students dropped out of or withdrew from online learning programs (Rovai, 2003; Willging & Johnson, 2009). Research studies on attrition and retention in online learning programs revealed the necessity for self-efficacy and motivation, student engagement, instructor interaction, and effective content design (Baxter, 2012, Boton & Gregory, 2015; Carr, 2000; Croxton, 2014; Frydenberg, 2007).

Generally, students are less likely to give up when they are motivated, whether intrinsically or extrinsically. Success in an online course is impacted by intrinsic and extrinsic motivation and self-efficacy (Baxter, 2012; Wang, Peng, Huang, Hou, & Wang, 2008). Institutions of higher learning can promote motivation and self-efficacy by communicating realistic expectations of the time and effort commitment required to succeed in online programs (Baxter, 2012). Wang et al. (2008) further concluded that "learning motivation has a direct impact on learning results" (p. 26). Studies demonstrated that students' confidence increased as

they experienced and overcame challenges resulting in increased motivation and self-efficacy (Baxter, 2012; Frydenberg, 2007; Wang et al., 2008).

Several research studies on attrition and retention found that engaging students through collaborative activities that promoted relationships with colleagues and accessibility to instructors were critical to persistence (Angelino, Williams, & Natvig, 2007; Carr, 2000; Croxton, 2014; Müller, 2008). Collaborative activities and student engagement cater to a variety of learning needs (Boton & Gregory, 2015). Wuebker (2013) specifically addressed the need for social interaction for adult learners, who are a large demographic in the online learning population. Developing collaborative activities, learner-centered activities, and social interactions requires more from instructors but enhances the learning experience for students (Angelino, Williams, & Natvig, 2007; Carr, 2000; Croxton, 2014). The "best distance education instructors are climbing the [learning] curve by finding ways to focus attention on learners" (Carr, 2000, para. 36).

Though some online courses could virtually run themselves, especially for independent, self-directed students, distance education courses often provide more data for instructors to use in assisting their students (Carr, 2000). Time on task, materials accessed, and multiple attempts all provide instructors and tutors quantitative data that allow students to self-assess (Carr, 2000). "Creating opportunities for purposeful, meaningful interactivity as central to online course design may help to promote persistence by addressing the need for students to become integrated into both formal and informal academic and social systems of an academic community" (Croxton, 2014, p. 321). Support, interaction, feedback, encouragement, and personal instruction from instructors significantly benefitted students more than institutional efforts and was critical

to the success of online learners (Baxter, 2012; Meyer, Bruwelheide, & Poulin, 2009; Müller, 2008).

Effective content design of an online course cannot be overlooked. Course design must promote a balance of student to student, student to instructor, and student to content interaction (Croxton, 2014). Excellent course design includes multimedia resources, participation and collaboration with colleagues and instructors, and challenging authentic activities (Boton & Gregory, 2015). Meyer, Bruwelheide, and Poulin (2009), in an analysis of near-perfect retention in an online certification program concluded that course designers should "incorporate content and activities that maximize academic integration and relevance for students" (p. 142) while allowing for the personality of instructors to be present and engaging. Meyer, Bruwelheide, and Poulin (2009) further concluded that frequency of participation in the coursework had a significant impact on student withdrawal or persistence.

The body of literature on attrition and retention in online learning programs acknowledged the complexity of attrition issues and revealed the necessity for self-efficacy and motivation, student engagement, instructor interaction and accessibility, and effective content design to promote persistence (Baxter, 2012, Boton & Gregory, 2015; Carr, 2000; Croxton, 2014; Frydenberg, 2007; Meyer, Bruwelheide, & Poulin, 2009; Müller, 2008; Willging & Johnson, 2009).

Methodology

The current study sought to explore how persistence and retention were promoted in an online graduate education program at a regional public university. The graduate education program enrolled candidates pursuing degrees in Curriculum and Instruction, Guidance and Counseling, Educational Administration, and Student Development and Leadership in Higher

Education. Candidates pursuing graduate degrees in these fields were required to enroll in the Applied Research course along with two other courses as part of the Comprehensive Program Review and pass with a minimum grade of B (80%). Each course was offered online in eight-week sessions.

Design of the Study

The research design for this study was an explanatory sequential mixed methods design study. The explanatory sequential design allowed us to begin with quantitative enrollment data of the three required courses then conduct qualitative research using anecdotal records to explain the enrollment data and explore the need for further research (Creswell, 2015).

Quantitative Enrollment Data

Quantitative enrollment data were collected from the Registrar's Office and from the Department of Curriculum and Instruction for the period beginning Fall 2013, which is when the department changed the courses to eight weeks rather than the traditional sixteen weeks. We first analyzed the data by session to determine the percentage of candidates persisting each session. Table 1 (below) shows each of the three required courses for the period beginning Fall 2013.

Table 1

Curriculum and Instruction Comprehesive Program Review Required Courses

Course Title	Semester	Beginning Enrollment	Ending Enrollment	% Persisting
Social & Cultural Influences	Fall A 13	38	36	94.74%
Social & Cultural Influences	Fall B 13	46	46	100.00%
Social & Cultural Influences	Spr A 14	39	39	100.00%
Social & Cultural Influences	Spr B 14	31	27	87.10%
Social & Cultural Influences	Summ 14	55	51	92.73%
Social & Cultural Influences	Fall A 14	75	66	88.00%

Social & Cultural Influences	Fall B 14	52	48	92.31%
Social & Cultural Influences	Spr A 15	79	74	93.67%
Social & Cultural Influences	Spr B 15	47	44	93.62%
Social & Cultural Influences	Summ 15	73	66	90.41%
Social & Cultural - Total		535	497	**92.90%**
Test & Measurement	Fall A 13	33	33	100.00%
Test & Measurement	Fall B 13	38	36	94.74%
Test & Measurement	Spr A 14	33	32	96.97%
Test & Measurement	Spr B 14	22	19	86.36%
Test & Measurement	Summ 14	32	31	96.88%
Test & Measurement	Fall A 14	65	55	84.62%
Test & Measurement	Fall B 14	52	49	94.23%
Test & Measurement	Spr A 15	47	42	89.36%
Test & Measurement	Spr B 15	57	49	85.96%
Test & Measurement	Summ 15	40	35	87.50%
Test & Measurement - Total		419	381	**90.93%**
Applied Research	Fall A 13	17	16	94.12%
Applied Research	Fall B 13	50	46	92.00%
Applied Research	Spr A 14	40	36	90.00%
Applied Research	Spr B 14	32	24	75.00%
Applied Research	Summ 14	50	44	88.00%
Applied Research	Fall A 14	40	37	92.50%
Applied Research	Fall B 14	35	29	82.86%
Applied Research	Spr A 15	57	42	73.68%
Applied Research	Spr B 15	53	37	69.81%
Applied Research	Summ 15	62	48	77.42%
Applied Research-Total		436	359	**82.34%**

We then analyzed the reasons for dropping courses. Graduate candidates who wished to drop a course in this online program did so through an online form. In addition to student and course identification data, the one question that addresses reason for requesting a drop listed 12 specific reasons for dropping the course as well as an open-ended "other" response. Unfortunately, the results from this form did not indicate that candidates are willing to share or

explain their reason(s) for dropping a course. Although exploring the reasons that candidates drop out of an online program could assist institutions in improving their programs, gathering accurate drop-out date could prove to be challenging (Willging & Johnson, 2009). For the purposes of the current study, we focused on the reasons candidates persisted in the online program in a challenging course and proposed further research on reasons for attrition.

As we analyzed the data, it became apparent that the Applied Research course would require further investigation. Although all three courses were required, research-based courses, the difference in persistence raised questions worth exploring. Though the persistence rate in Applied Research was 82.34%, a relatively high percentage by most online program standards, why were candidates dropping out of Applied Research? According to Brigham (2003, cited in Meyer, Bruwelheide, & Poulin, 2009), 87% of institutions with distance learning programs reported a 70% or better completion rate, and 66% of institutions with distance learning programs reported an 80% or better completion rate. The program site in the current clearly exceeded these institutional rates.

For the current study, we chose to focus on the positive aspects of the quantitative analysis and sought to determine what factors contributed to candidate persistence. For those who remained in the course, what specific factors contributed to their persistence? Were there factors within the control of the institution or instructors that could be changed to promote persistence among candidates?

Qualitative Documents and Record Data

According to Lincoln and Guba (1985), documents and records "are a rich source of information, contextually relevant and grounded in the contexts they represent" (p. 277). Documents and records were collected from the Department of Curriculum and Instruction for

the Applied Research course for the period beginning Fall 2013 continuing until Summer 2015. We developed categories for coding information in course evaluations and candidate correspondence. As the data were analyzed and themes emerged, we organized the data into a concept map and outline (Merriam, 1998; Rossman & Rallis, 2003).

At the end of each course, candidates were required to complete a course evaluation. One of the questions on the evaluation was an open-ended question that allowed candidates to express what worked well and what needed to be changed. Responses to the open-ended questions were categorized into the following areas:

- Peer Collaboration: emotional encouragement and academic support through Class Café
- Instructor Feedback: caring personal responses, specific and constructive feedback, and quick turnaround via email and Class Café
- Course Design: informative announcements, relevant assignments with rubrics and samples, and beneficial tutorial videos

In addition, candidates communicated directly with instructors via email providing unsolicited feedback on the course, their feelings about their personal performance, and their appreciation for support. All of these data were coded and analyzed with the course evaluation data.

Results

An explanatory sequential mixed methods study includes two phases: a quantitative analysis and a qualitative analysis (Creswell, 2015). The quantitative analysis of enrollment data revealed that two of the three required Competency Program Review courses (Social and Cultural Influences; Test and Measurements) had a persistence rate of at least 90% while the

Applied Research course had a persistence rate of only 82%. The lower persistence rate in the Applied Research course precipitated the qualitative analysis of documents and records that included candidates' opinions and feedback.

Discussion

Three major themes emerged from the qualitative analysis of course evaluations and candidate communication: peer collaboration, instructor feedback, and course design.

Peer Collaboration. The first major theme that emerged was significance of peer collaboration. Online courses must promote social interaction and relationships through peer collaboration to alleviate the isolation of the distance setting (Croxton, 2014; Müller, 2008). Examination of the course evaluations and candidate communications revealed the benefit of peer collaboration to the success of the candidates. Class Café, a discussion board forum established primarily for peer collaboration, dominated the comments in the course evaluations. One candidate's reflection was representative of many,

> Class Café was awesome. Being an online student is so different from the classroom setting that I have not felt a connection to any students so far in my graduate classes. At first, I really didn't want everyone seeing my questions for fear of embarrassment, but I soon realized that students were encouraging. I really enjoyed talking and learning from students in the class. (Student 12, Course Evaluation)

The encouragement and support from peers seemed to discourage candidates dropping from the course. Several candidates specifically commented on the benefit of peer collaboration and the support system it provided. "I was ready to quit," one candidate wrote in the course evaluation, "but the Class Café provided a needed line of communication with my classmates. I was able to talk to classmates and not feel so isolated" (Student 22, Course Evaluation). Another evaluation

reflected similar sentiments, “So many times I wanted to give up. The support system I found in the Class Café was amazing. It was good to know that I was not alone” (Student 25, Course Evaluation). Candidates frequently expressed their appreciation for the emotional support and encouragement of their peers.

Class Café also provided opportunities for candidates to engage in peer reviews, assignment clarification, and academic support. Candidates in the program found the discussion board forum to be a beneficial tool for asking questions on APA formatting, assisting their colleagues with difficult assignments, or gaining assistance from colleagues. “When I had questions, it was helpful to be able to use Class Café and discussion boards to ask questions and review answers that students and professors gave. I was able to gain clarification and write my assignments with more confidence” (Student 128, Course Evaluation). Sharing academic support also contributed to the peer connections and collaboration. One candidate summarized what many stated in their evaluations, “I really enjoyed Class Café. Taking a course online is not easy, I often feel disconnected and anxious. My peers contributed questions as well as answers. I also like that my peers posted helpful tips for each module” (Student 69, Course Evaluation). Through peer collaboration, the graduate candidates were able to support one another academically for the greater goal, as one candidate stated, “to share our own strengths and weaknesses to build a stronger education system” (Student 2, Course Evaluation). The social and academic support created through peer collaboration fulfilled the social presence that is a “direct contributor to the success of the educational experience” (Garrison, Anderson, & Archer, 2000, p. 89).

Instructor Feedback. Instructor feedback emerged as the second theme in the qualitative analysis. Meyer, Bruwelheide, and Poulin (2009) suggested that online courses

should "let the personality of the instructor come through" (p. 142). Course evaluations, IDEA comments, and candidate email correspondence indicated the importance of caring, personal responses and specific, constructive feedback on assignments. Candidates did not expect to receive caring, personal responses from their instructors in an online program. Several candidates commented about their experiences with personal correspondence from instructors. One candidate's reflection summarized the thoughts of many,

> I truly appreciate the emails sent when you felt I was running the risk of falling behind. I cannot say enough about how much I appreciated that. You are a great educator, simply because you cared. Thank you! …When you sent the emails to me expressing your concerns, I was struggling with course. I felt very overwhelmed and could not understand why my papers weren't getting better grades. Thank you for all the suggestions." (Student 51, Course Evaluation)

The online environment, primarily a text-based environment, is difficult to project an attitude of care and concern (Garrison, Anderson, & Archer, 2000). However, candidates believed their instructors cared about their success. "Professor, thank you for your encouraging words when I felt like I was falling apart. Your words to 'hang in there' were enough to keep me going. Thank your from the bottom of my heart" (Student 27, Course Evaluation)! Another candidate reported on the IDEA, "[My instructor] is a very caring instructor" (Comment 6, IDEA). Several candidates emailed their instructor at the end of a session with the same message, "Thank you for your support and guidance" (Student J, Student K, Student M, Emails).

Candidates appreciated the availability and quick responses not only to their questions but also to the assignments. Instructors posted a 48 to 72 hours response time on assignments, which allowed students to learn from feedback before beginning the next assignment. One

candidate stated, “Each professor always responded in a timely manner and with thorough response. I really appreciated their time and help this semester. The feedback that I received on assignments was also helpful” (Student 90, Course Evaluation). Instructors provided constructive feedback that allowed candidates to grow as learners. “The instructor always gave positive feedback on assignments but showed areas needing attention. That feedback compelled me to look for solutions on my own” (Comment 7, IDEA). Another candidate shared a similar comment, “Emails and feedback from professors were beneficial. I felt that both their criticism and their support has helped me to grow as a writer, and individual, and as a graduate student” (Student 75, Course Evaluation). According to Boston et al. (2009), students who receive reinforcement socially and instructionally are more likely to persist.

Content Design. The third theme that emerged from the qualitative analysis was the design and structure of the course content. Course content and design cannot be overlooked as an essential element in the success of online programs (Boton & Gregory, 2015; Garrison, Anderson, & Archer, 2000; Meyer, Bruwelheide, & Poulin, 2009). When classes are built to appear more professional, the experience is heightened and like-minded students will study together and support each other (Meyer, Bruwelheide, & Poulin, 2009). Though the responses were not as passionate about the content as they were about peer collaboration and instructor feedback, candidates nonetheless shared that they appreciated the course content and design. Many candidates appreciated the weekly announcements that provided an update on the upcoming assignment, tips for the week, and expectations. The announcement was posted on the course delivery system as well through email. One candidate seemed to summarize the feelings of others by stating,

> The announcements helped to keep me focused on the task at hand. I really appreciated the positive tone of all the announcements and the encouraging words. I felt as if I was sitting in an actual classroom when I received one of these messages from the professor. (Student 83, Course Evaluation)

Boston et al. (2009) summarized the significance of instructional design in the online environment as providing guidelines on how to use the medium effectively, efficiently, and proper netiquette. Online courses can be intimidating, but the candidates in this online graduate program seemed to appreciate the many resources that ensured their success. The course evaluations specifically mentioned video tutorials, video instruction, rubrics with expectations, sample work to demonstrated expectations, and checklists.

Limitations and Implications of the Study

The current study was limited to one online graduate program at one regional public university. Therefore, caution should be taken in generalizing these findings. However, the discussion of the qualitative data contributes to growing knowledge of why distance learners persist even in a challenging online course such as the Applied Research course. The findings can be applied to the improvement of collaboration, communication, and instructional design of online courses.

Need for Further Research

Further research needs to be conducted to explore factors for attrition associated with the Applied Research course at this regional university. The online drop form does not provide enough information to allow for program improvement. In general, as online programs become more prevalent, more research needs to address attrition and persistence of distance learners, adult learners, nontraditional, women, international, and veteran student populations. An

interview or survey of these populations would need to be part of the research methodology and data analysis. A qualitative case study of graduate students who do not persist in online learning programs would possibly produce more narrative feedback for institutions of higher learning.

Conclusion

As the number of online learning programs continues to increase, educational institutions must address the number of distance learners who drop out of online programs. Through an explanatory sequential mixed methods study, we evaluated quantitative enrollment data and qualitative anecdotal data. The current study focused on the factors that promoted persistence among distance learners in a challenging online graduate course: peer collaboration, instructor feedback, and content design. Rovai (2003) suggested, "Adult persistence in an online program is a complicated response to multiple issues. It is not credible to attribute student attrition to any single student, course, or school characteristic" (para. 37). Indeed, this study did not set out to address student attrition at all for this very reason. This study sought to explore how persistence and retention were promoted and how candidates were encouraged to stay.

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